

Table 1 - New CLS ASTER L4 B1 Requirements

L4	Key	Rel	req-status	Req_type	v_method	v_status	Text	clarification
<u>S-CLS-19106</u>	<u>new</u>	<u>B1</u>	<u>incremental</u>	<u>functional</u>	<u>demo</u>	<u>unverified</u>	<u>The WKBCH CI DART shall have the capability to receive product status information from ASTER GDS.</u>	
<u>S-CLS-19108</u>	<u>new</u>	<u>B1</u>	<u>incremental</u>	<u>functional</u>	<u>demo</u>	<u>unverified</u>	<u>The WKBCH CI DART shall have the capability to submit DAR queries, receive query responses from the ASTER GDS database using calls contained in the ASTER-GDS IMS API, and display the results to the user.</u>	
<u>S-CLS-19118</u>	<u>new</u>	<u>B1</u>	<u>incremental</u>	<u>functional</u>	<u>demo</u>	<u>unverified</u>	<u>The WKBCH CI DART shall have the capability to receive DAR IDs from ASTER GDS on receipt of a valid DAR submission and attach the DAR ID to locally stored versions of the DAR configuration parameters.</u>	
<u>S-CLS-19119</u>	<u>new</u>	<u>B1</u>	<u>incremental</u>	<u>functional</u>	<u>demo</u>	<u>unverified</u>	<u>The WKBCH CI DART shall provide the capability for users to interactively enter, edit, and delete lat/long coordinates in an Area of Interest (AOI) polygon via a GUI spatial tool and/or keyboard entries onto a forms-based screen.</u>	
<u>S-CLS-19126</u>	<u>new</u>	<u>B1</u>	<u>incremental</u>	<u>functional</u>	<u>demo</u>	<u>unverified</u>	<u>The WKBCH CI DART shall automatically update the information in spatial, temporal, and forms-based GUI displays, when the user changes the existing dependent information (parameters); Reference Document: DAR Submit Tool GUI Dependencies and Interactions.</u>	
<u>S-CLS-19127</u>	<u>new</u>	<u>B1</u>	<u>incremental</u>	<u>functional</u>	<u>demo</u>	<u>unverified</u>	<u>The WKBCH CI DART shall allow an ECS user to display the results of DAR queries on spatial, temporal, and textual-based GUI displays.</u>	
<u>S-CLS-19130</u>	<u>new</u>	<u>B1</u>	<u>incremental</u>	<u>functional</u>	<u>demo</u>	<u>unverified</u>	<u>The WKBCH CI DART shall provide user prompting and automatically supplied help messages that interact with ECS users.</u>	
<u>S-CLS-19135</u>	<u>new</u>	<u>B1</u>	<u>incremental</u>	<u>functional</u>	<u>demo</u>	<u>unverified</u>	<u>The WKBCH CI DART shall provide references to sources of climatology information, including: cloud climatology probabilities, seasonal snow and ice cover, and major ecosystem regions.</u>	
<u>S-CLS-19136</u>	<u>new</u>	<u>B1</u>	<u>incremental</u>	<u>functional</u>	<u>demo</u>	<u>unverified</u>	<u>The WKBCH CI DART shall have the capability to add or subtract overlays or backgrounds to or from the map region on a geographic display.</u>	
<u>S-CLS-19137</u>	<u>new</u>	<u>B1</u>	<u>incremental</u>	<u>functional</u>	<u>demo</u>	<u>unverified</u>	<u>The WKBCH CI DART spatial display shall provide the capability to display a physiographic map providing terrain and surface-cover features globally as geographic overlays, in a variety of projections:</u> <ol style="list-style-type: none"> <u>1. Geographical Projection (Plate Carree)</u> <u>2. Universal Transverse Mercator</u> <u>3. Polar Stereographic</u> <u>4. Lambert Conformal Conic</u> <u>5. Space Oblique Mercator</u> 	

L4	Key	Rel	req-status	Req_type	v_method	v_status	Text	clarification
<u>S-CLS-19139</u>	<u>new</u>	<u>B1</u>	<u>incremental</u>	<u>functional</u>	<u>demo</u>	<u>unverified</u>	The WKBCH CI DART spatial display shall provide the capability to display: a) <u>ground tracks</u> b) <u>areas of interest with xAR ID</u> c) <u>terminator crossings</u> d) <u>equator and other major latitude crossings</u> e) <u>instrument constraints (applicable to map), including:</u> <u>1) field of view</u> <u>2) look angles</u> <u>3) possible view swaths</u> f) <u>display of successfully observed scenes with cloud cover by quadrant (in association with the Area of Interest (AOI) polygon).</u>	
<u>S-CLS-19140</u>	<u>new</u>	<u>B1</u>	<u>incremental</u>	<u>functional</u>	<u>demo</u>	<u>unverified</u>	The WKBCH CI DART shall establish a maximum waiting period (in addition to that specified by the API) within which an acknowledgment is expected.	
<u>S-CLS-19141</u>	<u>new</u>	<u>B1</u>	<u>incremental</u>	<u>functional</u>	<u>demo</u>	<u>unverified</u>	The WKBCH CI DART shall retransmit a user DAR request after the waiting period expires, for a configurable number of times.	
<u>S-CLS-19142</u>	<u>new</u>	<u>B1</u>	<u>incremental</u>	<u>functional</u>	<u>demo</u>	<u>unverified</u>	The WKBCH CI DART shall provide messages to users of the current state of each user request (DAR submit, modify, or query), while waiting for results to be returned from ASTER-GDS.	
<u>S-CLS-19143</u>	<u>new</u>	<u>B1</u>	<u>incremental</u>	<u>functional</u>	<u>demo</u>	<u>unverified</u>	The WKBCH CI DART shall accept user requests to modify existing DARs from the science user in the following ways: a) <u>suspend an active DAR that has been submitted</u> b) <u>change the percent Cloud Cover in the increments specified by the DART</u> c) <u>reactivate the suspended DAR.</u>	
<u>S-CLS-19145</u>	<u>new</u>	<u>B1</u>	<u>incremental</u>	<u>functional</u>	<u>demo</u>	<u>unverified</u>	The WKBCH CI DART shall provide visualizations of possible ASTER instrument view swaths based on user supplied angles as a reference aid to the creation of ASTER DARs.	
<u>S-CLS-19153</u>	<u>new</u>	<u>B1</u>	<u>incremental</u>	<u>functional</u>	<u>demo</u>	<u>unverified</u>	The WKBCH CI DART spatial capability shall have the capability to display lat/long of any point on a geographical display selected by the user's pointing device.	
<u>S-CLS-19154</u>	<u>new</u>	<u>B1</u>	<u>incremental</u>	<u>functional</u>	<u>demo</u>	<u>unverified</u>	The WKBCH CI DART shall be able to calculate the size (in square km) of any user-specified polygonal area on a geographical display.	
<u>S-CLS-19155</u>	<u>new</u>	<u>B1</u>	<u>incremental</u>	<u>functional</u>	<u>demo</u>	<u>unverified</u>	The WKBCH CI DART help system shall provide ASTER-specific default settings for the three ASTER telescopes.	
<u>S-CLS-19156</u>	<u>new</u>	<u>B1</u>	<u>incremental</u>	<u>functional</u>	<u>demo</u>	<u>unverified</u>	The WKBCH CI DART help system shall provide ASTER-specific help messages that instruct authorized users how to change the instrument parameter settings for the three ASTER telescopes in their DARs.	
<u>S-CLS-19166</u>	<u>new</u>	<u>B1</u>	<u>incremental</u>	<u>functional</u>	<u>demo</u>	<u>unverified</u>	The WKBCH CI DART shall have the capability to provide a meaningful error message to users based on the receipt of an error code from the ASTER GDS.	

L4	Key	Rel	req-status	Req_type	v_method	v_status	Text	clarification
<u>S-CLS-19174</u>	<u>new</u>	<u>B1</u>	<u>incremental</u>	<u>functional</u>	<u>demo</u>	<u>unverified</u>	<u>The WKBCH CI DART shall have the capability to copy DAR configuration parameters from local storage or from a query of the ASTER GDS xAR database and incorporate all parameters into a new set of DAR configuration parameters.</u>	
<u>S-CLS-19176</u>	<u>new</u>	<u>B1</u>	<u>incremental</u>	<u>functional</u>	<u>demo</u>	<u>unverified</u>	<u>The WKBCH CI DART shall have the capability to save, delete, move, and copy: 1) DAR query input 2) DAR query results.</u>	

Table 2. CLS L4 Deletions.

L4	Key	Rel	req-type	req-status	v_method	v_status	clarification	Text
S-CLS-13840	13539	B1	functional	incremental	test	unverified		The WKBCH CI shall display data acquisition schedules as timelines.
S-CLS-14460	-8296	B1	functional	incremental	test	unverified		The WKBCH CI shall make spacecraft schedules accessible to authorized users on request.
S-CLS-14470	-8297	B1	functional	incremental	demo	unverified		The WKBCH CI shall display spacecraft schedules as timelines.

Table 3 - RbR to L4 Linkage Additions

RbR_id	L4_id
<u>ASTER-0120#B</u>	<u>S-CLS-19106</u>
<u>ASTER-0120#B</u>	<u>S-CLS-19108</u>
<u>ASTER-0120#B</u>	<u>S-CLS-19118</u>
<u>ASTER-0120#B</u>	<u>S-CLS-19127</u>
<u>ASTER-0120#B</u>	<u>S-CLS-19140</u>
<u>ASTER-0120#B</u>	<u>S-CLS-19141</u>
<u>ASTER-0120#B</u>	<u>S-CLS-19142</u>
<u>ASTER-0120#B</u>	<u>S-CLS-19145</u>
<u>ASTER-0120#B</u>	<u>S-CLS-19166</u>
<u>ASTER-0130#B</u>	<u>S-CLS-19108</u>
<u>ASTER-0140#B</u>	<u>S-CLS-19126</u>
<u>ASTER-0140#B</u>	<u>S-CLS-19143</u>
<u>IMS-0120#B</u>	<u>S-CLS-19174</u>
<u>IMS-0120#B</u>	<u>S-CLS-19176</u>
<u>IMS-0160#B</u>	<u>S-CLS-19130</u>
<u>IMS-0510#B</u>	<u>S-CLS-19135</u>
<u>IMS-0510#B</u>	<u>S-CLS-19139</u>
<u>IMS-0580#B</u>	<u>S-CLS-19119</u>
<u>IMS-0580#B</u>	<u>S-CLS-19126</u>
<u>IMS-0580#B</u>	<u>S-CLS-19136</u>
<u>IMS-0580#B</u>	<u>S-CLS-19137</u>
<u>IMS-0580#B</u>	<u>S-CLS-19139</u>
<u>IMS-0580#B</u>	<u>S-CLS-19153</u>
<u>IMS-1090#B</u>	<u>S-CLS-19143</u>
<u>IMS-1105#B</u>	<u>S-CLS-19135</u>
<u>IMS-1140#B</u>	<u>S-CLS-19119</u>
<u>IMS-1140#B</u>	<u>S-CLS-19126</u>
<u>IMS-1140#B</u>	<u>S-CLS-19145</u>
<u>IMS-1140#B</u>	<u>S-CLS-19153</u>
<u>IMS-1140#B</u>	<u>S-CLS-19154</u>
<u>IMS-1170#B</u>	<u>S-CLS-19155</u>
<u>IMS-1170#B</u>	<u>S-CLS-19156</u>
<u>IMS-1230#B</u>	<u>S-CLS-19106</u>
<u>IMS-1230#B</u>	<u>S-CLS-19108</u>

RbR_id	L4_id
<u>IMS-1230#B</u>	<u>S-CLS-19118</u>
<u>IMS-1230#B</u>	<u>S-CLS-19127</u>
<u>IMS-1230#B</u>	<u>S-CLS-19140</u>
<u>IMS-1230#B</u>	<u>S-CLS-19141</u>
<u>IMS-1230#B</u>	<u>S-CLS-19142</u>
<u>IMS-1230#B</u>	<u>S-CLS-19166</u>
<u>IMS-1261#B</u>	<u>S-CLS-19140</u>
<u>IMS-1261#B</u>	<u>S-CLS-19141</u>
<u>IMS-1261#B</u>	<u>S-CLS-19142</u>
<u>IMS-1262#B</u>	<u>S-CLS-19108</u>